

---

## BOOK NOTICES

---

### **Children of Tomorrow**

The principles and applications of eugenics are presented here in the form of questions and answers. The 371 questions and their well-thought-out answers cover rather completely the applications of eugenics to the population question, the individual, and the public. The presentation is objective in so far as it can be made so, and is free from objectionable propaganda and maudlin sentiment. The author, being a distinguished student of environment, as well as of heredity, approaches the problem with a broad viewpoint, unobscured by wishful thinking. The book can be well recommended to the general public.—L. H. S.

**Tomorrow's Children**, by Ellsworth Huntington. x+139 pp. New York, John Wiley and Sons, 1935. \$1.25.

---

### **Learning Botany**

This Workbook is designed for use in classroom discussions in the presence of materials. A majority of the thirty-three exercises are devoted to a consideration of the vegetative and reproductive phases of the typical flowering, seed-bearing plant. This is followed by a survey of the plant kingdom. The physiological aspect receives the greatest emphasis although all the major divisions of the field of Botany are adequately presented.

The book contains suggestions and questions regarding observations to be made. It provides aid to the recording of observed data in the form of graphs, blank charts and an extensive set of diagrams. Data needed in certain learning situations are supplied as well as problems calling for use of data in new situations. There are plans for summaries, and problems and questions leading to a recalling and weaving together of what has been accomplished. Subject matter is presented as a means to the teaching of the student rather than as an end in itself. The student is aware of his continuous mental development, and may acquire a true scientific attitude by becoming acquainted with and making use of the scientific method.—R. A. DOBBINS.

**Workbook in General Botany**, by E. N. Transeau, H. C. Sampson, and L. H. Tiffany. v+160+73 pp. Looseleaf; lithographed by Edwards Brothers, Inc., Ann Arbor, Michigan. 1935. \$1.75.

### Termites and Termite Control

The first edition of this outstanding report of "The Termite Investigations Committee" was published in January, 1934. Since then the authors of the various chapters have continued their researches and have reported their results in the second edition, revised, which has been recently published. No change has been made in chapter 46, which contains the general recommendations for the control of termite damage. The major additions are (1) in Chapter 2, a paragraph on the relation of moisture to the production of arsine from wood preservatives containing arsenic; (2) in chapter 4, additional experimental data bearing on the sensitiveness to moisture of the Pacific Coast species of termites; (3) in chapter 9, experimental evidence that termites are dependent upon fungi for the nitrogenous elements of their diet to such an extent that in the absence of fungi their normal growth is retarded; (4) in chapter 24, an experimental investigation of caste differentiation in termite communities; (5) in chapter 34, changes regarding Bruce Preservative, Halowax, and Wolman Salts; (6) in chapter 36, substitution of the 5th Progress Report of the International Termite Exposure Test for the 4th Progress Report; (7) in chapter 41, a statement of the essential features of the Standard Biological Test; also, some Standard Biological Tests on two wallboards, and an experimental test of the toxicity and penetration throughout the test block of refined creosote in a solvent; and (8) in the added chapter, 57, a discussion of the association of termites with arsine-producing fungi. An excellent subject index has been added, which was one criticism of the first edition.

The writers are indeed to be congratulated on this second edition. It is a most complete report and serves as a noteworthy example of what can be accomplished when scientists, engineers, and corporations co-operate in solving such problems. Every contractor, architect, and engineer should possess a copy. As a scientific reference on the subject, it is invaluable for entomologists and teachers of biology.—R. H. DAVIDSON.

**Termites and Termite Control**, by Charles A. Kofoid et al. 795 pages, 182 figures. Second Edition, Revised. Berkeley, University of California Press, 1936. \$5.00.

### Procedure in Taxonomy

This little book is the result of a symposium on taxonomy by graduate students and professors at Stanford University. It was prepared "for the purpose of supplying the student as well as the professional systematist with (1) a clear-cut and comprehensive statement of the principles of taxonomy; (2) the International Rules of Zoological Nomenclature; (3) Summaries of Opinions Rendered to the present date; (4) a complete index—the only index of the Rules and Summaries ever published."

The original material in the book is very brief, covering only 25 pages. The chapter headings are: Introduction, Systematic Categories, Types, Descriptions of New Species, Specific Names, Synonymy, Storage of Type Material, and Latin Terms and Abbreviations. The chapters on Types, Synonymy, and Latin Terms and Abbreviations are particularly valuable. The chapter on Synonymy is concerned with methods of listing synonymy, and contains suggestions which, if followed by all taxonomists, would eliminate a great deal of confusion. The chapter on Descriptions of New Species contains very little of value to the zoologist; the examples given are from the field of paleontology. The very important matter of drawings is barely mentioned. The chapter on Specific Names contains some good suggestions for the selection of new names, but lacks a discussion of the Law of Priority as it applies to the use of specific names. A subject completely overlooked in this book is the matter of constructing analytical keys, which is certainly an important phase of taxonomic procedure.

The brief, concise discussion, as far as it goes, and the copy of the Rules and Opinions, make this book a handy one for any paleontologist or zoologist venturing into the field of taxonomy.—D. J. BORROR.

**Procedure in Taxonomy, Including a Reprint of the International Rules of Zoological Nomenclature with Summaries of Opinions Rendered to the Present Date**, by Edward T. Schenk and John H. McMasters. vii+72 pages. Stanford University, California, Stanford University Press, 1936. \$2.00.

### Atoms

This book, which originally appeared in German under the title "Moderne Physik," is an excellent exposition of the theoretical development of modern physics. The book is written in a style which makes it attractive reading for the student not too far advanced in his graduate work. A delightful feature is the set of appendices at the end of the book where rigorous proofs to many of the hypotheses stated are given. The English edition has been thoroughly modernized and brought up to date with the developments of recent years.—H. H. NIELSEN.

**Atomic Physics**, by Max Born. xii+352 pp. New York, G. E. Stechert and Co., 1936.

### Our Enemy the Termite

In order to properly cope with the termite or so-called "white ant," the public should be better informed on this subject. One means of obtaining a better understanding of this very interesting group of insects is by reading this book written by Dr. Snyder. He presents in readable style, a very interesting but concise scientific discussion of all phases of the termite problem.

The first six chapters discuss the place of termites among insects; the different species of termites; their life history and the caste system; their physiology and behavior; their food habits and guests of the termite colony. The four remaining chapters discuss the damage done by termites and methods of control. Practical suggestions are given for building termite-proof houses and for saving structures already infested. Various methods of control now being used are discussed and fraudulent ones exposed.

An appendix is included which contains recommendations for city building codes, for insuring protection against termites and decay, a model tally sheet for recording termite damage by building inspectors, and specifications for an agreement between the house owner and a contractor undertaking to remedy termite damage to buildings.

A table of contents, an index, and a glossary of technical terms are included. Many illustrations aid in the presentation of material. Large easily read type on good quality paper, combined with simple presentation of subject matter make this book especially valuable to the home-owner and contractor.

R. H. DAVIDSON.

**Our Enemy the Termite**, by T. E. Snyder. 196 pp., 56 figs. Ithaca, The Comstock Publishing Co., 1935. Price, \$3.00.

### Valence

This recent book by Kronig which has appeared in the Cambridge Series of Physical Chemistry is a valuable asset to the library of any physicist or chemist. The contents, which are chiefly devoted to a discussion of the band spectra of diatomic and polyatomic molecules and their bearing upon the problems of molecular structure and chemical binding, are comprehensive, yet presented in a manner such that the book may be read by a student of chemistry or physics in his early graduate career. In a preliminary course in molecular theory where the more intimate problems are not dealt with, the book would appear to be a very suitable text.—H. H. NIELSEN.

**The Optical Basis of the Theory of Valence**, by R. deL. Kronig. viii+246 pp. Cambridge, at the University Press; New York, the Macmillan Co., 1935. \$4.50.

### Serological Reactions

This monograph, from the pen of the distinguished Nobel Prize winner, Karl Landsteiner, brings together under one cover the results of a long series of serological experiments by many workers, including the author and his associates. Critical problems involving the antigen-antibody reactions are surveyed, and various hypotheses are compared and evaluated. The antigenic properties of proteins, carbohydrates, lipoids and artificial conjugated substances are thoroughly discussed. Recent work on the chemistry of cell antigens is presented. Particularly interesting and valuable are the chapters on the specificity of cell anti-

gens, and the specificity of antibodies. Comprehensive bibliographies are included at the ends of the various chapters, although the arrangement of the references is not conducive to their most efficient use.—L. H. S.

**The Specificity of Serological Reactions**, by Karl Landsteiner, M. D. vii+178 pp. Springfield, Illinois, Charles C. Thomas, 1936. \$4.00.

---

### Quantum Mechanics

This book is an attempt to replace the physical models, of which the experimental physicist was earlier so fond, with the quantum mechanics. Wherever it is possible graphical methods are employed. Such problems as the formation of molecules, valence bonds and electrons in crystals receive especial attention, while the last chapter is devoted to the topic of perturbation theory as applied to physical problems and to a discussion of the description of physical events. The book can be very sincerely recommended to the student of physics and chemistry.

H. H. NIELSEN.

**Elementary Quantum Mechanics**, by R. W. Gurney. vii+159 pp. Cambridge, at the University Press; New York, the Macmillan Co., 1934. \$2.35.

---

### The Meaning of Chemistry

The sixth edition of this fine work has been revised by Glasstone, and is a worthy successor to the previous editions. The volume is an extraordinarily well written introduction to the subject of chemistry and chemical research. It begins with a discussion of such simple things as the nature and purpose of laboratories, the description and use of apparatus, and the general meaning of chemistry. For the non-technical reader (for whom the book was written) this is especially worth while, since a knowledge of such things is mistakenly taken for granted in most chemistry books written for the layman. One by one the underlying principles of chemistry are clearly developed, until the reader is prepared to enter the field of practical applications. These are presented in most readable style. The last section deals especially with organic chemistry. New material in this edition includes up-to-date discussions of valency, atomic structure, transmutation and disintegration of elements, artificial radioactivity, heavy hydrogen, synthetic rubber, artificial plastics, vitamins, hormones, and nitrogen fixation. The book is most highly recommended to those interested in acquiring an understanding of the work of the chemist.—L. H. S.

**Chemical Discovery and Invention in the Twentieth Century**, by Sir William A. Tilden. Sixth edition, revised by S. Glasstone. xvi+492 pp. New York, E. P. Dutton & Co., 1936. \$4.00.

---

### Protoplasm

Under this title Dr. Seifriz has written a very readable book for students of biology, medicine, and related fields. The discussion considerably exceeds the bounds indicated by the title and the book would serve as a satisfactory introduction to the subject of general physiology. An adequate background of physico-chemical concepts and principles is presented before the author proceeds to a discussion of the biological aspects of the subject. Both the dull finality of scientific dogmatism and the inconclusiveness of too encyclopedic presentation have been skillfully avoided. A few mis-statements will be noted by a careful reader, but on the whole the book is commendably free from factual errors. The reviewer's principal criticism is that the last few chapters do not seem to maintain quite the high standard set by most of the book. A fairly extensive selected bibliography, classified according to chapter headings, is appended to the discussion.—B. S. MEYER.

**Protoplasm**, by William Seifriz. 584 pp. New York, McGraw-Hill Book Company, 1936. \$6.00.